- (3) For condensers, record the outlet (product side) gas or condensed liquid temperature averaged over the same period as the compliance demonstration while the vent stream is routed and constituted normally. Locate the temperature sensor in a position that provides a representative temperature.
- (4) For thermal oxidizers, record the firebox temperature averaged over the same period as the compliance demonstration. Locate the temperature sensor in a position that provides a representative temperature.
- (5) For water scrubbers, record the pressure drop and flow rate of the scrubber liquid averaged over the same time period as the compliance demonstration while the vent stream is routed and constituted normally. Locate the pressure and flow sensors in positions that provide representative measurements of these parameters.
- (6) For caustic scrubbers, record the pressure drop, flow rate of the scrubber liquid, and either the pH, conductivity, or alkalinity of the scrubber liquid averaged over the same time period as the compliance demonstration while the vent stream is routed and constituted normally. Locate the pressure sensors, flow sensors, and pH, conductivity, or alkalinity sensors in positions that provide representative measurements of these parameters. Ensure the sample is properly mixed and representative of the fluid to be measured.
- (7) For flares, record the presence of a pilot flame. Locate the pilot flame sensor in a position that provides an accurate and continuous determination of the presence of the pilot flame.
- (8) For biofilters, record the pressure drop across the biofilter beds, inlet gas temperature, and effluent pH, averaged over the same time period as the compliance demonstration while the vent stream is routed and constituted normally. Locate the pressure, temperature, and pH sensors in positions that provide representative measurement of these parameters. Ensure the sample is properly mixed and representative of the fluid to be measured.
- (9) For carbon adsorbers, record the total regeneration stream mass or volumetric flow during each carbon bed regeneration cycle during the period of the compliance demonstration. Record

the temperature of the carbon bed after each carbon bed regeneration cycle during the period of the compliance demonstration (and within 15 minutes of completion of any cooling cycle(s)). Record the operating time since the end of the last carbon bed regeneration cycle and the beginning of the next carbon bed regeneration cycle during the period of the compliance demonstration. Locate the temperature and flow sensors in positions that provide representative measurement of these parameters.

(10) For oil absorbers, record the flow of absorption liquid through the absorber, the temperatures of the absorption liquid before and after the steam stripper, and the steam flow through the steam stripper averaged during the same period of the compliance demonstration. Locate the temperature and flow sensors in positions that provide representative measurement of these parameters.

§ 63.5540 By what date must I conduct a performance test or other initial compliance demonstration?

(a) You must conduct performance tests or other initial compliance demonstrations no later than 180 calendar days after the compliance date that is specified for your source in §63.5495 and according to the provisions in §63.7(a)(2).

§ 63.5545 What are my monitoring installation, operation, and maintenance requirements?

- (a) For each CMS required in this section, you must develop and make available for inspection by the permitting authority, upon request, a site-specific monitoring plan that addresses the provisions in paragraphs (a)(1) through (3) of this section.
- (1) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);
- (2) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and

§ 63.5545

- (3) Performance evaluation procedures and acceptance criteria (e.g., calibrations).
- (b) In your site-specific monitoring plan, you must also address the provisions in paragraphs (b)(1) through (3) of this section.
- (1) Ongoing operation and maintenance procedures in accordance with the general requirements of §§ 63.8(c)(1), (3), (4)(ii) and 63.5580(c)(6);
- (2) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d)(2); and
- (3) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §§ 63.10(c), (e)(1), (e)(2)(i) and 63.5585.
- (c) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.
- (d) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.
- (e) For each continuous emissions monitoring system (CEMS), you must meet the requirements in paragraphs (e)(1) through (6) of this section.
- (1) Each CEMS must be installed, operated, and maintained according to the applicable performance specification (PS) listed in paragraphs (e)(1)(i) through (iv) of this section:
- (i) PS-7 of 40 CFR part 60, appendix B, for CEMS used to measure hydrogen sulfide emissions:
- (ii) PS-8 of 40 CFR part 60, appendix B, for CEMS used to measure volatile organic compound emissions;
- (iii) PS-9 of 40 CFR part 60, appendix B, for CEMS that use gas chromatography to measure organic HAP emissions; and
- (iv) PS-15 of 40 CFR part 60, appendix B, for CEMS that use Fourier transform infrared spectroscopy to measure organic HAP emissions.
- (2) You must conduct a performance evaluation of each CEMS according to the requirements in §63.8 and according to the applicable performance specification listed in paragraphs (e)(1)(i) through (iv) of this section.
- (3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, ana-

lyzing, and data recording) for each successive 15-minute period.

- (4) The CEMS data must be reduced to operating data averages computed using valid data from at least 75 percent of the hours during the averaging period. To have a valid hour of data, you must have four or more data points equally spaced over the 1-hour period (or at least two data points during an hour when calibration, quality assurance, or maintenance activities are being performed), except as specified in paragraph (a)(5) of this section.
- (5) The CEMS data taken during periods in which the control devices are not functioning in controlling emissions, as indicated by periods of no flow for all or a portion of an affected source, must not be considered in the averages.
- (6) Determine the daily average of all recorded readings for each operating day during the semiannual reporting period described in Table 8 to this subpart.
- (f) For each continuous parameter monitoring system (CPMS), you must meet the requirements in paragraphs (f)(1) through (9) of this section.
- (1) Satisfy all requirements of performance specifications for CPMS upon promulgation of such performance specifications.
- (2) Satisfy all requirements of quality assurance (QA) procedures for CPMS upon promulgation of such QA procedures.
- (3) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period.
- (4) To calculate a valid hourly average, there must be at least four equally spaced values for that hour, excluding data collected during the periods described in paragraph (f)(6) of this section.
- (5) Have valid hourly data for at least 75 percent of the hours during the averaging period.
- (6) The CPMS data taken during periods in which the control devices are not functioning in controlling emissions, as indicated by periods of no flow for all or a portion of an affected source, must not be considered in the averages.
- (7) Calculate a daily average using all of the valid hourly averages for each

operating day during the semiannual reporting period.

- (8) Record the results of each inspection, calibration, and validation check.
- (9) Except for redundant sensors, any device that is used to conduct an initial validation or accuracy audit of a CPMS must meet the accuracy requirements specified in paragraphs (f)(9)(i) and (ii) of this section.
- (i) The device must have an accuracy that is traceable to National Institute of Standards and Technology (NIST) standards
- (ii) The device must be at least three times as accurate as the required accuracy for the CPMS.
- (g) If flow to a control device could be intermittent, you must install, calibrate, and operate a flow indicator at the inlet or outlet of the control device to identify periods of no flow.

CONTINUOUS COMPLIANCE REQUIREMENTS

§63.5555 How do I demonstrate continuous compliance with the emission limits, operating limits, and work practice standards?

- (a) You must demonstrate continuous compliance with each emission limit, operating limit, and work practice standard in Tables 1 and 2 to this subpart that applies to you according to methods specified in Tables 5 and 6 to this subpart.
- (b) You must report each instance in which you were not in continuous compliance (as specified in Tables 5 and 6 to this subpart) with each emission limit, each operating limit, and each work practice standard that apply to you. This includes periods of startup, shutdown, and malfunction. These instances are deviations from the emission limits, operating limits, and work practice standards in this subpart. These deviations must be reported according to the requirements in §63.5580.
- (c) During periods of startup, shutdown, and malfunction, you must operate according to the SSM plan.
- (d) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating according to the SSM plan.

§ 63.5560 How do I monitor and collect data to demonstrate continuous compliance?

- (a) You must monitor and collect data according to this section.
- (b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times that the affected source is operating, including periods of startup, shutdown, and malfunction.
- (c) You may not use data recorded during monitoring malfunctions, associated repairs, required quality assurance or control activities, and periods of no flow for all or a portion of an affected source in data averages and calculations used to report emission or operating levels, nor may such data be used in fulfilling a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.
- (d) All terms in this subpart that define a period of time for completing required tasks (e.g., weekly, monthly, quarterly, or annually) refer to the standard calendar periods.
- (1) You may change time periods specified in this subpart for completing required tasks by mutual agreement with the Administrator, as specified in subpart A of this part. For example, a period could begin on the compliance date or another date, rather than on the first day of the standard calendar period. For each time period that is changed by agreement, the revised period must remain in effect until it is changed. A new request is not necessary for each recurring period.
- (2) Where the period specified for compliance is a standard calendar period, if the initial compliance date occurs after the beginning of the period, then you must comply according to the schedule specified in paragraph (d)(2)(i) or (ii) of this section, as appropriate.
- (i) You must comply before the end of the standard calendar period within which the compliance deadline occurs, if there remain at least 3 days for tasks that must be performed weekly, at